Procedure for issuance of a Sewer Certificate

To be issued if the maximum available slope for drainage piping is less than 1%.

Minimum fixture unit loading shall be as required per the adopted plumbing code.

In order for a Sewer Certificate to be issued, the property owner shall be informed that due to less than desirable slope and instead of installing a sewer lift station, the city of Glendale will allow an engineered sewer system to be installed. The property owner shall sign the certificate stating that he/she is aware that due to this situation, additional maintenance may be required to keep the sewer system operating-properly.

The sewer design engineer shall design, seal, sign and date the certificate.

Both the engineer and property owner's signatures are required on the certificate before a permit may be issued.

The design engineer shall be made aware that the pipe installed shall be shot in with an instrument at 25 feet maximum intervals, if the pipe is in lengths of 20 feet. If pipe lengths are less than 20 feet, then the maximum distance between shots shall be 10 feet. These shots shall be recorded and shown as **slope** between stations. (See example of how to provide this information at the end of this document)

All wyes, changes of direction and manhole inlets and outlets shall also be shot in and recorded as **slope** between shots.

After installation, the design engineer, shall certify that the sewer was installed as per his direction and that he accepts the installation and slopes as recorded. **(No part of the piping system shall slope less than .34% regardless of whether the design engineer approves it.)**

At this point the city of Glendale plumbing inspector shall be called out to inspect the installation, review the recorded slopes and observe the test. If the recorded slopes differ from the design slopes, the inspector will require that the design engineer approve the slopes as installed, before providing city of Glendale approval. The test shall be either water or air, however, air shall not be allowed for

plastic piping systems. Tests using water shall be made by filling the certified line from the property line to the highest grade level and observing the piping systems for signs of leakage. The air test shall be made by plugging all openings and pressurizing the system to five psi for a minimum of 15 minutes during which time the gauge shall not show any drop. The gauge for this type of test shall not be calibrated to more than twice the test pressure applied and shall not be calibrated in more than one pound increments. (Exception: a 15 pound gauge shall be acceptable for a five pound test if the gauge is calibrated in one tenth (1/10) pound increments.)

After the test has passed, the piping may be backfilled. After backfilling, a mandrill test shall be performed, in the presence of the city plumbing inspector, on each section of certified pipeline. After the mandrill test passes and there are no outstanding issues, the city of Glendale plumbing inspector will approve the system.

The original sewer certificate shall be returned to the city of Glendale after completion of the installation with all of the information requested provided.

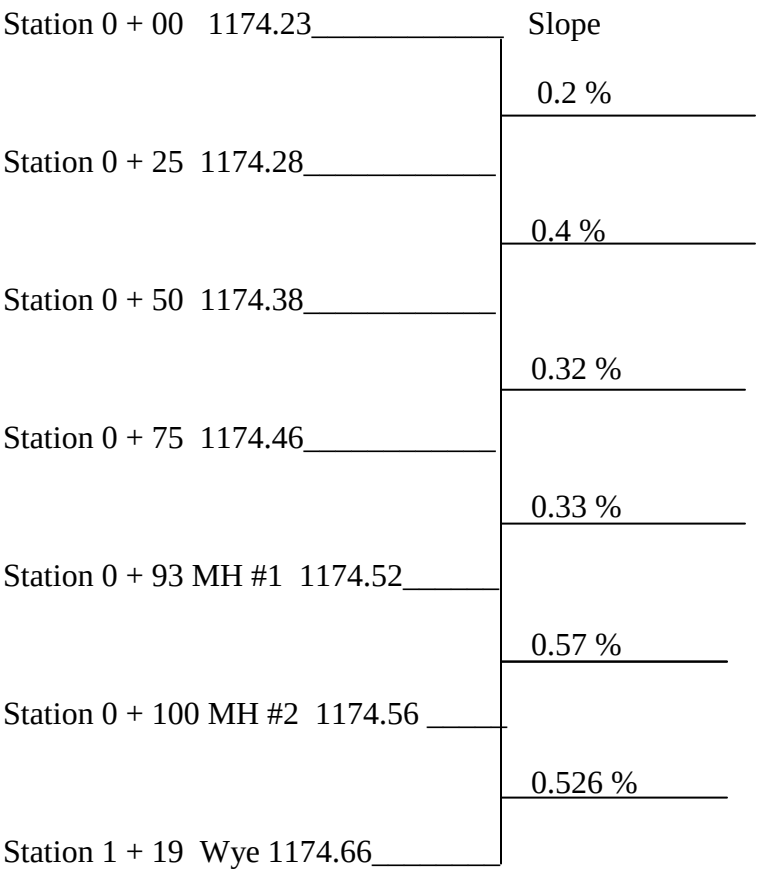
The forms are only available through the Plumbing/Mechanical plan review department. If you would like to apply for a Sewer Certificate please call 623-930-2800 and ask the receptionist to connect you to a Plumbing/Mechanical Plans Examiner or Inspector.

See example of how to show slope below:

Example of how to show the slope of the pipe between stations.

Please use this format

The minimum slope allowed by the Glendale Building Safety Department is 0.34 %



The slope will be the **difference in elevation** between each station, divided by the **distance** between each station, **times100**. This formula will give you slope in percentage.